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General Notice

Other product names used herein are for identification purposes only and may be trademarks of their respective owners. LAUNCH disclaims any and all rights in those marks.

This unit is made for the purpose of persons who have special techniques and certifications.

Disclaimer

- To take full advantage of the unit, you should be familiar with tires of various kinds.
- All information, illustrations, and specifications contained in this manual are based on the latest information available at the time of publication. The right is reserved to make change at any time without notice.

Safety Precautions

- This manual is a necessary part of the product. Please read carefully.
- Keep the manual for later use when maintaining the machine.
- This machine can only be used for the designated purposes. Never use it for any other purpose. The manufacturer is not held responsible for the damage incurred by improper use or use other than the intended purpose.
- The equipment can only be operated by qualified personnel with special training. Modification to any components or parts, or use the machine for other purpose without either obtaining the agreement from the producer, or observing the requirement of the instructions may lead to direct or indirect damage to the equipment.
- This machine should be installed on the stable ground.
- Keep the back panel 0.5m away from the wall for good ventilation. Enough room should be left on both sides of the machine for convenient operation.
- Do not put this machine in a place with high temperature or moisture, or near the heating system, water tap, air-humidifier or furnace.
- Do not put the machine near the window with sunlight. Protect the unit with a curtain or shield if necessary.
- Avoid lots of dust, ammonia, alcohol, thinner or spraying binder.
- People who are no operating the machines should be kept away when it is used.
- Use appropriate equipment and tools, protective and safety equipment, including eyeglasses, earplugs and working boots.
- Pay special attention to the safety marks on the machine.
- Do not touch or approach the moving parts by hand during operating.
- Do not remove the safety device or override it.
- Use #2 lithium lubricants (grease) only within the safety range. Refer to the appendix for the safety data.
- Before moving the tire changer, contact maintenance personnel.
- The product is better used under the following conditions:

  Temperature: 0℃~45℃

  Relative humidity: 30~95%

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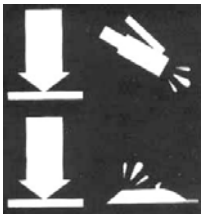
1. Warning Sign

1		Keep safety for electrified devices.
2		Do not put your leg(s) between the splitter and the tire when the splitter is used.
3		Do not put your hand(s) between the tire and turntable when machine is operated.
4		Do not put your hand(s) between the MOUNT/DEMOUNT head and the tire.
5		It is forbidden to put your hand(s) or tools in the claws when they are opened or closed.
6		Pedal down to the first gear to perform direct inflating action; the nozzle whiff when you pedal down to the second gear.
7		Do not stand behind the vertical arm when machine is operated.

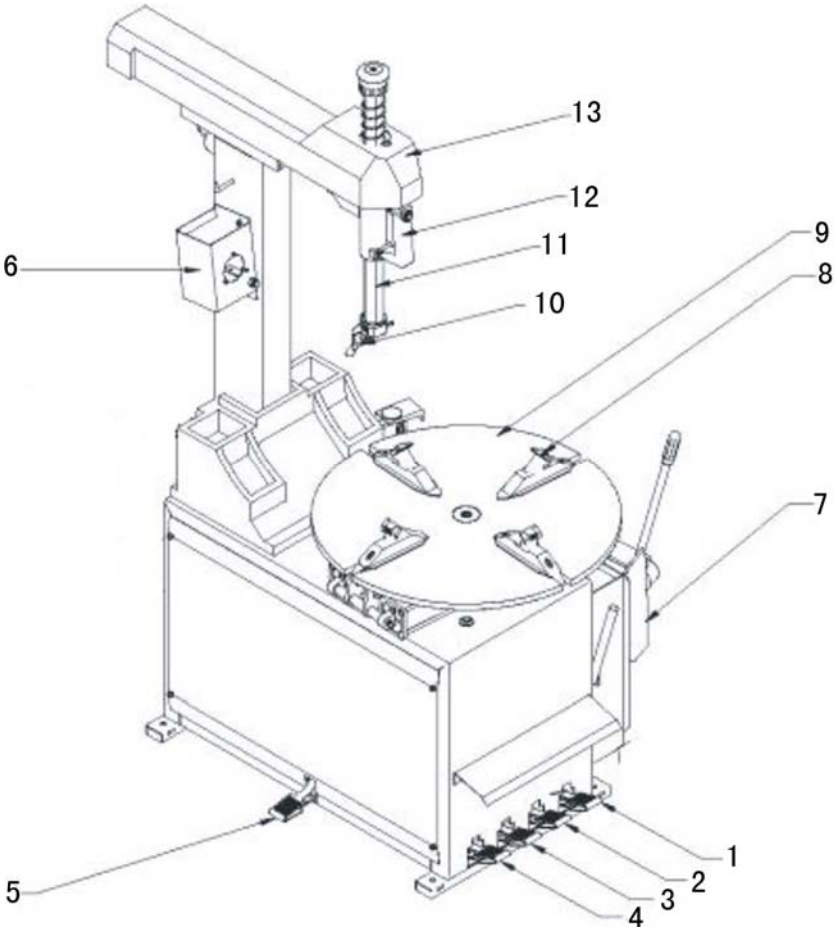
2. Introduction

Thank you for purchasing our tire changers. The machine has been manufactured in accordance with the very best quality principles. This manual is one integral part of the product. Before using the tire changer, read carefully the warnings and instructions contained in this manual since they provide important information on operation safety and maintenance.
Keep this manual for future reference.

2.1 Technical Data

Max tire diameter	1000mm
Max tire width	13"
Internal locking rim dimensions	13" -24"
External locking rim dimensions	11"-22"
Force on splitter blade	2500Kg
Working pressure	8-10bar
Power supply voltage	220V/110V/380V
Motor power	1.1KW/0.75KW
Noise level in working conditions	<70dB

2.2 Description of Machine



1. Reverse control pedal
2. Splitter control pedal
3. Clamping cylinder control pedal
4. Tilting arm control pedal
5. Inflating control pedal
6. Inflator box
7. Wheel Support
8. Jaw
9. Turntable
10. Mount/Demount head
11. Hexagon bar
12. Handle
13. Cover

3. Safety Requirement

3.1 Usage

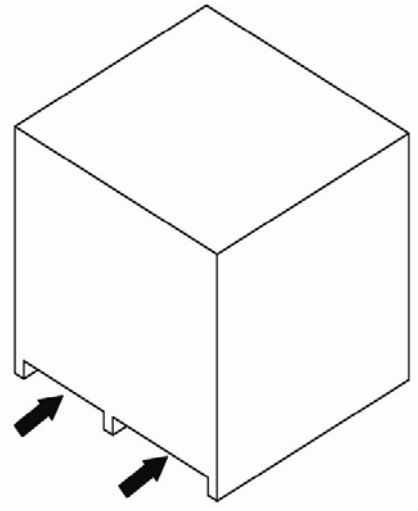
This tire changer has been designed and manufactured exclusively for demounting and mounting tires from/into rims from 10" to 24" and with the maximum diameter of 1000mm.
Any other use is to be considered incorrect and unreasonable.
In particular the MANUFACTURER (herein LAUNCH TECH CO., LTD.) can't be held responsible for any damage caused through the use of this tire changer for purposes other than those specified in this manual, and therefore inappropriate, incorrect and unreasonable.

3.2 General Safety Precautions

This tire changer may only be used by specially trained and authorized expert.
Any tampering and modification to the equipment carried out without the manufacturer's prior authorization will free him from all responsibility for damage caused directly or indirectly by the above actions.
The tire changer comes complete with instructions and warning transfers which are designed to be long-lasting. If they should for any reason be damaged or destroyed, please ask immediately for replacements from LAUNCH.
Keep it away from combustible, explosive objectives, avoid strong light, sunshine, and keep it in good ventilation.
Make sure to use original spare parts and accessories, installed by authorized personnel according to the Manual.
Be careful if there are any dangers happen, stop the machine, and contact us without any hesitation.
Non-operation personnel should be kept away from the machine.
Operators should be protected by protective devices (glove, eye-protection glasses, and working-clothes) to avoid any accidental injuries.

4. Transport

This tire changer must be transported in its original packaging and kept in the position shown on the package itself.
The packaged machine may be moved by means of a fork lift with a suitable capacity. Insert the forks according to the directions shown in the figure below.



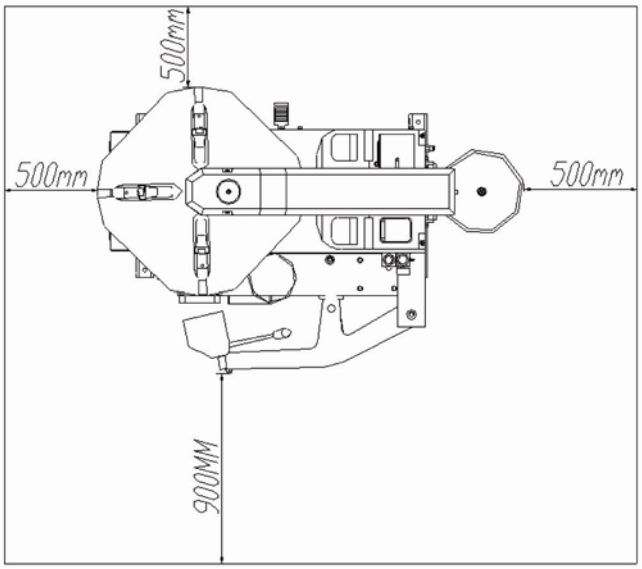
5. Unpacking

Use proper tools and protection devices (gloves etc) to unpack the goods package.
Check that the equipment is in perfect condition, making sure that no parts are damaged or missing, if in doubt do not use the machine and contact your distributor.
Put the packing materials (plates, nails, screws, plastic bags) in safety place.

6. Installation

6.1 Space Required

When choosing the place of installation is sure that it complies with current safety work regulations.
This machine must be connected to the mains electric power supply and the compressed air system. It is therefore advisable to install the machine near these power sources.
The place of installation must also provide at least the space shown in the figure below so as to allow all parts of the machine to operate correctly and without any restriction.



If this machine is installed outside it must be protected by a lean-to.

6.2 Caution

Before making the connections, check that the characteristics of your systems correspond to those required by the machine.
Even small jobs done on the electrical system must be carried out by professional personnel.
Connect the machine to the electrical network, which must be provided with line fuses, a good earth plate in compliance with regulations in force and it must be connected to automatic circuit breaker.
Warning: Should the tire changer be lacking in electric plug, so the user must set one, which is at least 16A and which conforms to the voltage of the machine, in compliance with the regulations in force.

6.3 Operation Test

When the pedal (1) is pressed the turntable should turn in clockwise direction. When the pedal is pulled up the turntable should turn in the counterclockwise direction. Warning: if the turntable turns in the opposite direction to that desired, reverse the wires in the three-phase plug.
Pressing the pedal (2) can activate the splitter; when the pedal is released the splitter returns to its original position.
Pressing the pedal (3) can open the four clamps; when the pedal is pressed again they can close.
Pressing the pedal (4) can tilt the arm; when the pedal is pressed again it can return to its working position.
When the pedal located on the left side of the machine is pressed, air is released from the airline gauge. Gauge will indicate the pressure after release of air.
Don't lean on the turntable during this operation, possible dirty dust on the turntable could offend the operator's eyes. For the same reason, be careful as not to accidentally push the inflating pedal while working.

7. Operation

Don't use the machine until you have read and understood the entire manual and the warnings it provides.
The operation of the tire changer is divided into three parts:

1. Splitting the tire and wheel rim;
2. Demounting the tire;

3. Mounting the tire.

Warning: before carrying out any operation, deflate the tire and take off all the wheel balancing weights.

7.1 Splitting the tire and wheel rim

Before any operations remove the old wheel balancing weights and check whether the tire is deflated or not, if not, please deflate it first.

Warning: when the splitter control pedal is operated, anything within the action space of splitter arm can be in the danger of being crushed.

Check whether the tire is deflated or not, if not, please deflate it first.
Close the turntable clamps completely.

Warning: splitter with the clamps in the open position can be extremely dangerous for operator's hands; during the splitting operations never touch the side of the tire.

Position the wheel against the rubber stop on the right side of the tire changer. Position the splitting blade against the tire upper side with a distance of about 1 cm from the rim. Pay attention to the blade, which must be correctly onto the tire not onto the rim.
Press the pedal (2) to activate the splitter and release it when the blade has reached to the end of its travel or in any case when the tire and wheel rim is split.
Rotate the tire slightly and repeat the operation around the entire circumference of the rim and from both sides until the tire is completely detached from the rim.

7.2 Demounting the Tire

Before any operations remove the old wheel balancing weights and check whether the tire is deflated or not, if not, please deflate it first.

When tilting the vertical arm, be sure that nobody stands behind the tire changer. Press pedal (4) to tilt the vertical arm, and clean the turntable.
Spread the grease onto the tire and the rim.

Failure to use the appropriate grease may cause the serious damage to the tire.
When clamping the tire, never have your hand(s) under the tire. To clamp the tire correctly, position the wheel exactly aiming to the center of the turntable.

1) Rim locking from outside

Position the clamps according to the reference mark on the turntable by pressing the pedal to its intermediate position.
Place the tire on the clamps and keep the rim pressed, and then press the pedal (3) as far as it will go.

2) Rim locking from inside

Position the clamps so that they are completely closed.

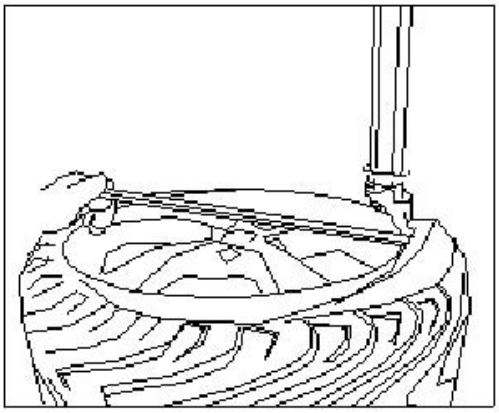
Place the tire on the clamps and press the pedal (3) to open the clamp hand thereby lock the rim.
Make sure the rim is firmly fixed to the clamps.

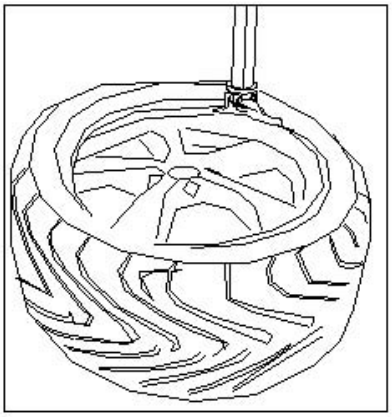
Press the pedal (4) to restore the vertical arm to its working position.
Push out the locking button in the handle, release hex bar.

Lower the hex bar until the mounting tools rests against the edge of the rim.
Then lock it using the locking button in the handle. This way the mounting arm is locked in a vertical and horizontal direction and the mounting head is automatically moved to a distance of about 2mm from the rim.
Do not put hands on the wheel, when moving the mounting arm to its working position your hand could be crushed between the rim and the mounting head with the crowbar inserted between the tire and the front section of the mounting head, move the tire over the mounting head.

WARNING: In order not to damage the inner tube, if there is one, it is advisable to carry out this operation with the valve 10cm to the right of the mounting head.

Chains, bracelets, loose clothing or foreign objectives in the vicinity of moving parts may cause danger to the operator.
With the crowbar held in this position, rotate the turntable in a clockwise direction by pressing pedal (1) until the tire is completely separated from the wheel rim. To prevent industrial accidents, keep hands and other parts of the body as far as possible from the tool arm when the table top is turning.
Remove the inner tube if there is one, need not release the mounting arm, press pedal(4), directly tilt the vertical arm.
Repeat the operation for the other tire side.





7.3 Mounting the Tire

Warning: this checking of tire and rim is of utmost importance to prevent tire explosion during the inflating operation.
Before beginning mounting operation make sure that:

The tire and the cord fabric are not damaged. If you note the defects, do not mount the tire.
The rim is without dents and is not warped. Attention with alloy rims, dents because internal micro-cracks not visible to naked eye. This can compromise the rim and also be the source of danger especially during inflation.
The diameter of the rim and tire are exactly the same. Never try to mount a tire on a rim if you cannot identify the diameter of both.
Lubricate the tire with the special grease in order to avoid damaging them and to facilitate the mounting operations.
When tilting the vertical arm, make sure that nobody stands behind the tire changer.
When you are working with the rims of the same size, it is not necessary always to lock and unlock the hex bar. Just tilt and restore the vertical arm with the horizontal arm and mounting arm locked.
Move the tire so that it passes below the front section of the mounting head and is brought up against the edge of the

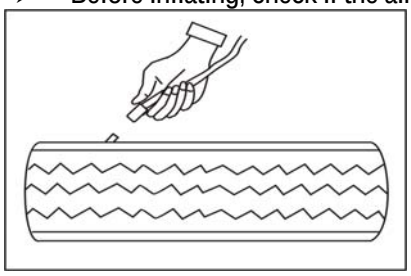
rear section of the mounting head itself. Keep the tire pressed into the wheel rim channel with your hands, and press the pedal (1) to rotate the turntable clockwise. Continue until you have covered the whole circumference to the wheel rim; insert the inner tube (if there is one).
Repeat the same operations to mount the upper side of the tire.

Warning: demounting and mounting are always done with the clockwise turntable rotation. Anticlockwise rotation is used only to correct operator's errors or if the turntable stalls.

8. Inflation

⚠Caution: Danger of explosion!

- The safety procedures should be closely followed. Review and abide by the following instructions. Otherwise serious injury or death can be resulted.
- The manufacturer shall not be held responsible for any possible accident when the safety procedures are not followed.
- Before inflating, check if the air is well connected.



- Inflating procedures are as shown in figure above. Loose the wheel on the turntable.
- Connect the outlet of the gun to the air inflation valve.
- Slowly press the switch on the inflating gun for several times during inflation to make sure that the reading on pressure gauge meets the manufacturer's specifications. The pressure should not exceed 3.5bar.
- If the pressure exceeds the limit, press the button on the gun inflator so that the pressure goes down to what is required.

Caution:

- Carefully check the dimensions of rim and tire to see if they match each other. Check and make sure that the tire is not worn or damaged before inflation.
- When a high pressure is required, remove the tire from the tire changer and resume the inflation in a special protective hood.
- Be careful when inflating the tire. Keep hands and the rest of human body as far away from tire as possible.

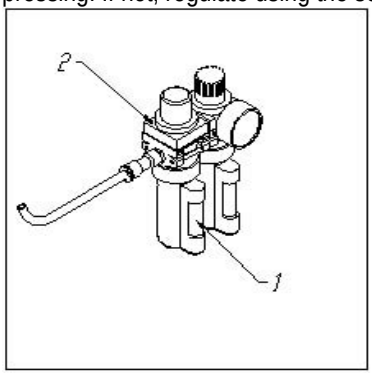
9. Maintenance

9.1 General warning

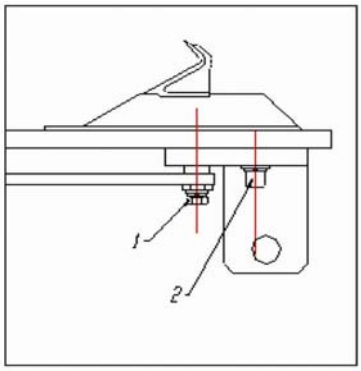
Unauthorized personnel may not carry out maintenance work.
Regular maintenance as described in the instructions is essential for correct operation and long lifetime of the tire changer.
If maintenance is not carried out regularly, the operation and reliability of the machine may be compromised, thus placing the operator and anyone else in the vicinity at risk. Before carrying out any maintained work, disconnect the electric and pneumatic supplies. Moreover, it is necessary to release the tire load less 3-4 times in order to let the air in pressure go out of the circuit.
Defective parts must be replaced exclusively by expert personnel using the manufacture's spare parts.
Removing or tampering with safety devices (pressure limiting and regulating valves) represents a contravention of safety regulations. In particular, the manufacturer shall not be held responsible for complaints deriving from the use of spare parts made by other manufacturers or for damage caused by tampering or removal of safety systems.

9.2 Maintenance Operations

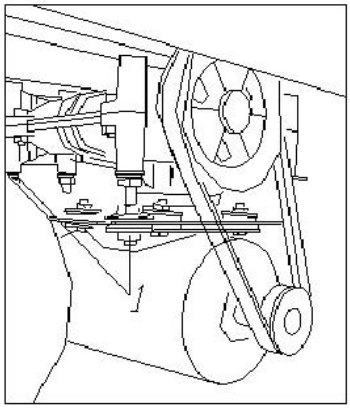
Clean the turntable once a week with diesel fuel so as to prevent the formation of dirt, and grease the clamp sliding guides.
Carry out the following operations at least once every 30 days:
Check the oil level in the lubricator tank. If necessary, fill up by unscrewing screw 2; only use SAE30 oil.
Check that a drop of oil is injected into the reservoir, every 3-4 times the pedal is pressed, one drop every 3-4 times pressing. If not, regulate using the screw (2).

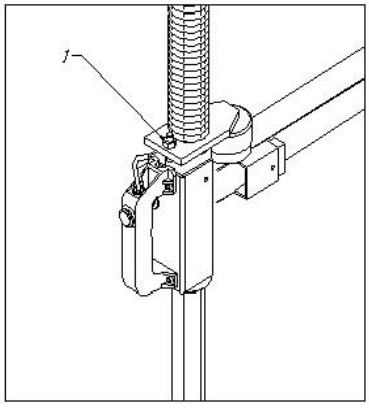


If the oil is less than the minimum oil line please add the lubricating oil in time and if there is water in the water cup please pour it in time. Please pay attention to the red line on the oil filter time by time.
Recommended Oil: Lubricant ISO VG-32
Retighten the clamp tightening screws (1) and the screws on the turntable slides (2).



If the turntable doesn't work, it may be caused by loose drive belt, check it as follows: Before any operations, please disconnect the electric power supplies.
Remove the left side body panel of the tire changer. Tighten the drive belt by means of the special adjusting screw (1) on the motor support.
It is necessary to adjust the screw (1) in the locking plate of the mounting arm, if the mounting head doesn't lock or it doesn't rise from the rim of 2mm necessary for working.





If clamps or splitter open/close slowly, it is necessary to clean or replace the silencer, and proceed as follows:
1) Remove the left side panel of the machine.
2) Unscrew the silencer put on the clamp opening/closing pedal.

3) Clean by a jet of compressed air or, if damaged, replace by referring to the spare parts catalogue.

9.3 Storage

In the event of storage for long periods of time, make sure to disconnect all sources of power and grease the clamp sliding guides on the turntable to prevent from oxidizing.

9.4 Scrapping

If you decide scrape the machine, be sure to make it inoperative by disconnecting it from all sources of power.
Remove all non-ferrous materials and dispose of them as prescribed by national law.
Collect the oil and dispose of it at an authorized point as prescribed by national law.
Scrape the rest ferrous material.

CE Declaration of Conformity

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CE Declaration of Conformity

For the following equipment:

(Product Name) Tyre Changer

(Model Designation) TWC-512NIC

is herewith confirmed to comply with the requirements set out in the Council Directive on the Approximation of the Laws of the Member States relating to Low Voltage Directive (2006/95/EC) and Machinery Directive(2006/42/EC). For the evaluation regarding the Directives, the following standards were applied:

EN 60204-1:2006+A1:2009
EN ISO12100-1:2003+A1:2009
EN ISO12100-2:2003+A1:2009
EN ISO14121-1:2007

The following importer/manufacturer is responsible for this declaration:

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Warranty

THIS WARRANTY IS EXPRESSLY LIMITED TO PERSONS WHO PURCHASE LAUNCH PRODUCTS FOR PURPOSES OF RESALE OR USE IN THE ORDINARY COURSE OF THE BUYER'S BUSINESS.

LAUNCH electronic product is warranted against defects in materials and workmanship for one year (12 months) from date of delivery to the user. This warranty does not cover any part that has been abused, altered, used for a purpose other than for which it was intended, or used in a manner inconsistent with instructions regarding use. The exclusive remedy for any automotive meter found to be defective is repair or replacement, and LAUNCH shall not be liable for any consequential or incidental damages. Final determination of defects shall be made by LAUNCH in accordance with procedures established by LAUNCH. No agent, employee, or representative of LAUNCH has any authority to bind LAUNCH to any affirmation, representation, or warranty concerning LAUNCH automotive meters, except as stated herein.

Disclaimer

THE ABOVE WARRANTY IS IN LIEU OF ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Order Information

Replaceable and optional parts can be ordered directly from your LAUNCH authorized tool supplier. Your order should include the following information:
Quantity
Part number
Item description

Customer Service

If you have any questions on the operation of the unit, please contact us: 86-755-84528767.

If your unit requires repair service, return it to the manufacturer with a copy of the sales receipt and a note describing the problem. If the unit is determined to be in warranty, it will be repaired or replaced at no charge. If the unit is determined to be out of warranty, it will be repaired for a nominal service charge plus return freight. Send the unit pre-paid to:

Attn: Overseas Department
LAUNCH TECH. CO., LTD.
Launch Industrial Park,
North of Wuhe Rd.,
Banxuegang, Longgang,
Shenzhen, Guangdong, P. R. China